

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2010 Proceedings

Americas Conference on Information Systems
(AMCIS)

3-1-2010

Secure Web Development Teaching Modules

Li-Chiou Chen

Pace University, lchen@pace.edu

Follow this and additional works at: <http://aisel.aisnet.org/amcis2010>

Recommended Citation

Chen, Li-Chiou, "Secure Web Development Teaching Modules" (2010). *AMCIS 2010 Proceedings*. 483.
<http://aisel.aisnet.org/amcis2010/483>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2010 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Tutorial and Workshop Proposal for AMCIS 2010

Submission Date:	03/01/2010
Workshop/tutorial Title:	Secure Web Development Teaching Modules
Duration:	<input type="checkbox"/> Full Day <input checked="" type="checkbox"/> Half Day
Classification:	<input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Workshop

Abstract

Web application security has been an emerging topic while an increasing number of information systems are designed based on Extensible Markup Language (XML) and using Hypertext Transfer Protocol (HTTP) for communications. For example, in recent years, social networking software has been used intensively, especially among college students, and integrated with various marketing or gaming software. This workshop will discuss security issues in web application development and demonstrate web security vulnerabilities and countermeasures through hands-on exercises. The exercises are developed by a NSF-funded project called SWEET (**Secure web development teaching**). SWEET is consisted of eight teaching modules of web application security. To demonstrate potential web server vulnerabilities, the teaching modules include hands-on exercises that are pre-configured in Linux virtual machines. The workshop will also discuss examples of incorporating SWEET in Information Systems curriculum.

Workshop Leader Information (Please attach a copy of your resume in your email submission)

Name:	Li-Chiou Chen
Affiliation:	Pace University
Postal Address:	320 Goldstein Academic Center 861 Bedford Rd. Pleasantville, NY10549
Telephone:	914-7733907
Cell:	
Fax:	
Email:	lchen@pace.edu

Additional Workshop Presenters (copy for each one)

Name:	
Affiliation:	
Postal Address:	
Telephone:	
Cell:	

Fax:	
Email:	

Speakers' background, description of workshop, and envisioned activities during the workshop (please provide information for each speaker)

Detailed Description

Li-Chiou Chen, PhD

Li-Chiou has conducted extensive research on information and web security. Her research has been focused on the impacts of policy and managerial decisions to counter computer attacks on the Internet. Using computational modeling approaches, she has conducted technological and policy analysis in the area of Internet-based attacks and biological warfare. She has published papers in top academic journals, including Computer & Security, Decision Support Systems and IEEE Transactions. Li-Chiou has taught numerous courses on the theory and practice of information and web security, developed many hands-on information security laboratory modules for undergraduate students, and contributed significantly in developing Pace University's Security Laboratory. She is also instrumental in helping Pace become one of the Centers of Academic Excellence in Information Assurance Education accredited by the National Security Agency and the Department of Homeland Security.

Description

This is a hands-on workshop in which the first part covers the basics of secure web development and then the students will be guided through hands-on exercises using pre-configured virtual machines.

Outline:

1. Web Application Development for E-Commerce
2. Common Web Security Issues for Developers
3. Secure Web Development Teaching Modules
4. Hands-on Exercises: Web certificates and SSL
5. Hands-on Exercises: SQL injection and remedies
6. Hands-on Exercises: Cross-site scripting and remedies

Special Requirements

Note: Regular equipment includes a computer, projector and screen.

(X) Computers

(X) Internet Access

() Others, Please specify:

Audience

Insert a description of likely participants

Maximum number of participants: __20__

Specify the requirements for the audience such as computer, special software, and Internet access etc., in the following:

Participants should bring a laptop in order to run hands-on exercises. The software needed will be prepared in DVDs and pre-configured in virtual machines. The participants' laptops need to have a DVD reader and at least 1GB (2GB preferably) memory to run virtual machines.